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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/624,679	07/23/2003	Ram Singh Rana	82522	6694

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NATH & ASSOCIATES
1030 15th STREET, NW
6TH FLOOR
WASHINGTON, DC 20005

EXAMINER

MIS, DAVID C

ART UNIT	PAPER NUMBER
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2817

DATE MAILED: 01/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/624,679	RANA ET AL.	
	Examiner	Art Unit	
	David Mis	2817	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 July 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4, 11 and 19 is/are rejected.
- 7) ☒ Claim(s) 5-10, 12-18 and 20 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 July 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>1022</u> . | 6) <input type="checkbox"/> Other: _____ |

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

2. Claims 1, 11 and 19 are rejected under 35 U.S.C. 102(e.) as being clearly anticipated by Brunn et al.

Brunn et al disclosed a VCO (Figure 1) connected to supply (V1, V2, a supply voltage is considered a reference voltage) and reference (V1, V2) voltages for radio frequency operation (Background section), comprising at least one inductor (139), at least one varactor (132, 134, 136, 138) connected in

parallel with the at least one inductor (Figure 1), a pair of P-channel MOS transistors (122, 124, column 2, last line) connected across the at least one varactor (Figure 1), each p-channel transistor having source, drain and gate terminals (Figure 1), wherein the drain terminal of the first of the pair of p-channel MOS transistors is connected to the gate terminal of the second of the pair of p-channel MOS transistors (column 3, lines 2-5) and the drain terminal of second of the pair of MOS transistors being connected to the gate terminal of the first of the pair of MOS transistors (column 3, lines 2-5); and biasing means (110, 150) for providing a biasing current to the voltage-controlled oscillator circuit (column 2, lines 49-65 and column 3, lines 41-50), the biasing means configured according to one of a biasing n-channel MOS transistor (154) connected to the supply voltage and a biasing p-channel MOS transistor connected to the reference voltage (all supply voltages are considered reference voltages).

3. Claims 1-4 are rejected under 35 U.S.C. 102(b.) as being clearly anticipated by Chien.

Chien disclosed a VCO (Figures 4-6; Figure 5 is Figure 4 with temperature compensation added and Figure 6 is Figure 5 with varactors added, see column 3, lines 24-52) connected to supply (VDD, GROUND) and reference (VDD, GROUND, all the power supply voltages are reference voltages)

voltages for radio frequency operation (Background section), comprising at least one inductor (L), at least one varactor (Figure 6) connected in parallel with the at least one inductor, cross coupled p-channel MOS transistors (P1, P2), biasing means (N5 of Figure 4, column 3, lines 21-23) for providing a biasing current to the VCO circuit, the biasing means configured to one of a biasing n-channel MOS transistor connected to the supply (VDD, GROUND) voltage and a biasing p-channel MOS transistor connected to the reference voltage ("one of" is the n-channel transistor N5 shown in Figure 4 and used instead of the p-channel transistor in Figures 5 and 6); the drain terminal of the biasing n-channel MOS transistor is connected to the supply voltage (shown in Figure 4, but disclosed for each figure 4-6); the gate terminal of the biasing n-channel MOS transistor is connected to a biasing voltage (VT); the source terminal of (N5) being connected to the source terminals of (P1 and P2) (shown in Figure 4, but disclosed for Figures 4-6).

4. Claims 5-10, 12-18 and 20 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to David Mis whose telephone number is (571)272-1765. The examiner can normally be reached on Monday through Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Pascal can be reached on (571)272-1769. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



David Mis
Primary Examiner
Art Unit 2817